

# Common and Glossy Buckthorn Information Handout

## The problem with buckthorn

Introduced to North America from Europe in the 1800s, Common Buckthorn (*Rhamnus cathartica*) and Glossy Buckthorn (*Rhamnus frangula*) are non-native and invasive shrubs. These species have been used as hedgerows, ornamental shrubs and shelterbelts; they also grow into small trees. Buckthorn makes a nice full hedge – it also makes an impenetrable thicket in parks, roadsides, forests and your neighbor's backyard.

Each buckthorn fruit produces two to four seeds that remain viable up to 6 years. Birds eat the fruit and then deposit the seeds everywhere. Buckthorn is hardy – it tolerates shade, full-sun, drought and bad soil. As a result, it quickly moves from pruned, well-kept yards and invades other areas.

## What's bad about buckthorn

- Out-competes native plants for light, moisture and nutrients.
- Reduces diversity of plants and song birds in forests.
- Forms an impenetrable thicket or understory layer.
- Destroys wildlife habitat.
- Has seeds that remain viable up to 6 years.
- Contains a laxative that causes birds to deposit undigested seeds.
- Has messy fruits that stain cars, decks and concrete.
- Lacks natural insects and plant disease controls to contain its spread.
- Contributes to erosion by shading out plants on forest floor.
- Host to crop pests, including crown rust fungus (*Puccinia coronata*) and soybean aphid (*Aphis glycines*).

In 2001 the Minnesota Department of Agriculture declared both Common and Glossy Buckthorn restricted noxious weeds. This means that the sale, transportation or movement of these plants is prohibited.

## Buckthorn difficult to destroy

A single stem of buckthorn cut to the ground will re-sprout from the stump. These multiple new stems will grow up to six feet in a single season, creating a very large shrub in one to two years.



## Battling buckthorn

If you follow the steps below, your success rate against buckthorn will be reasonably high. However, because each berry contains two to four seeds, seedlings may appear where the stump was removed or treated. Be diligent about checking the area. You can win the battle if you persist.

**1. Seedlings, small trees and shrubs** – Pull by hand or use a Weed Wrench that is available for no charge from the City. *See handout Weed Wrench.* This manually-operated tool clamps onto a stem up to three inches in diameter and operates as a lever to uproot woody plants. Call 952-563-8751 to reserve equipment.

**2. Large shrubs and stumps** – For buckthorn greater than three inches, use a handsaw and cut as close to the ground as possible. Then, follow one of these options:

- DIG the stump out.



## Call before you dig!!

**Gopher State One Call**

Metro area 651-454-0002

MN Toll-free 1-800-252-1166

b. Use the herbicide Ortho Brush-B-Gon (8 percent Triclopyr), which is available in your local hardware or garden center. It is most effective when used from August through January. **DO NOT DILUTE! For safety, it is extremely important to read and carefully follow the label safety directions.** Purchase a hand spray bottle to use exclusively for this herbicide. Properly mark the spray bottle before pouring in the herbicide. When done, return the unused portion to the original container and discard at the Hennepin County Problem Waste Facility on 96th and Humboldt. PLEASE NOTE! If rain is predicted within four hours or if the temperature is consistently below freezing, do not cut and treat the shrubs.

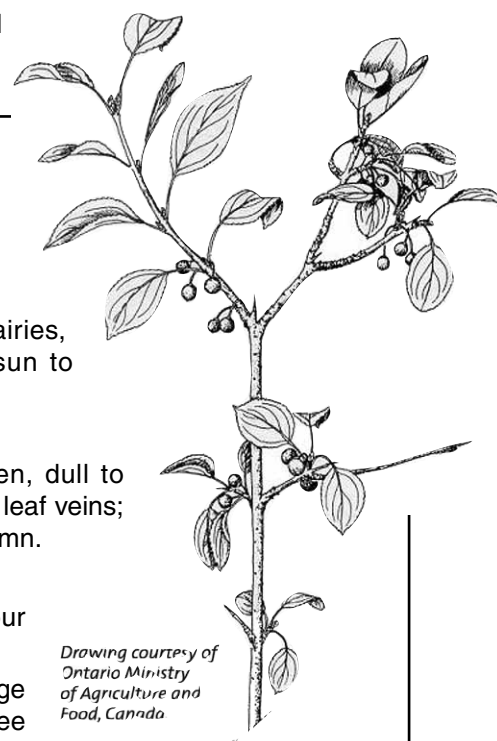
**3. Disposal of branches** – Have your garbage hauler pick them as part of your yardwaste service or, for a fee, you can take them to the NRG compost site in Burnsville. Call 952-736-1915 for hours and location.

## Identifying the invader

For help identifying buckthorn *see below* or, check out the Internet, ask your local garden center or contact the City at 952-563-8760.

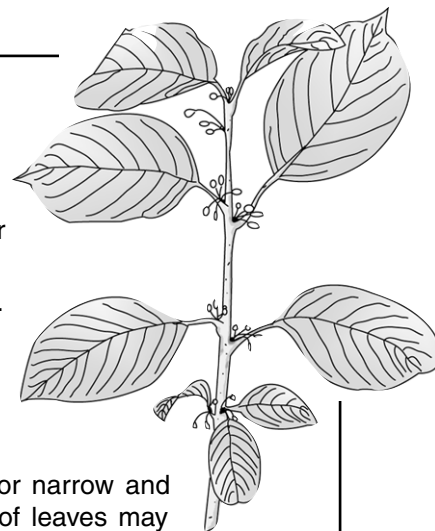
### Common Buckthorn

<b>Scientific name</b>	<i>Rhamnus cathartica</i> .
<b>Other common name</b>	European Buckthorn.
<b>Nursery cultivars</b>	None.
<b>Type of habitat</b>	Invades dry areas, like woodlands, savannas, prairies, abandoned fields and roadsides; grows in full sun to dense shade.
<b>Shape of plant</b>	Height is 10 - 25 feet; upright, oval form.
<b>Leaves</b>	Egg-shaped with finely toothed edges; dark green, dull to glossy; opposite at tip of stem, 3 - 5 pairs of curved leaf veins; leaves stay dark green and on the tree late into autumn.
<b>Stems</b>	Opposite buds; sharp thorn at tip of twig.
<b>Flowers</b>	Produced in May; small, yellowish-green color; four petals.
<b>Fruit and seed</b>	Round berry-like fruit, 1/4" diameter; arranged in large clusters; green to black color; each fruit contains three to four seeds.



### Glossy Buckthorn

<b>Scientific name</b>	<i>Rhamnus frangula</i> .
<b>Other common name</b>	Fen Buckthorn, Alder Buckthorn.
<b>Nursery cultivars</b>	<i>Columnaris</i> (Tall Hedge Buckthorn) – narrow, columnar form. <i>Asplenifolia</i> (Fernleaf Buckthorn) – narrow, fern-like leaves.
<b>Type of habitat</b>	Invades wet areas, like bogs, marshes, river banks, wetlands and pond edges; will grow in full sun or dense shade.
<b>Shape of plant</b>	Height is 10-18 feet, upright, oval form.
<b>Leaves</b>	Oval-shaped with toothless edges ( <i>Rhamnus frangula</i> ) or narrow and fernlike ( <i>asplenifolia</i> ); dark green and glossy, underside of leaves may be hairy; alternate on stem; 3 - 5 pairs of curved leaf veins; leaves stay green and on the tree late into autumn.
<b>Stems</b>	Alternate buds; No thorn at tips of twig.
<b>Flowers</b>	Produced in late May - June; small, creamy-green color; five petals.
<b>Fruit and seeds</b>	Round berry-like fruit – 1/4" diameter; produces less fruit than Common Buckthorn; red-brown to black color; each fruit contains two to three seeds.


















































## Replacement plants








If you chemically treat a buckthorn stump, you can safely plant a native shrub in the area after two weeks. With careful selection, a homeowner can have a wonderful, non-invasive shrub to provide a habitat and food source for wildlife.

Check with your local nursery for special features of natives such as fast growing, edible fruits, red stems in winter, fragrant, preferable soil type or bird/butterfly attracters. *See below.*

### Native shrubs

Name	Species	Height in feet	Width in feet	Fall leaves	Flowers	Light
Speckled Alder	<i>Alnus rugosa</i>	15 - 20	15 - 20 Spreading	Yellow	Reddish/green	 
Saskatoon Serviceberry/Juneberry	<i>Amelanchier alnifolia</i>	8 - 10	5 Wide	Orange/yellow	White	 
Regent Serviceberry	<i>Amelanchier alnifolia</i> "Regent"	5	5 Rounded/upright	Yellow to red	White	 
Black Chokeberry	<i>Aronia melanocarpa</i>	6	6	Red/purple	White	
Silky Dogwood	<i>Cornus amomum</i>	6 - 12	6 - 12 Oval	Red	White	
Red - Osier Dogwood	<i>Cornus stolonifera</i>	8	8	Dark red	White	
Gray Dogwood	<i>C. racemosa</i>	8 - 12	6 - 10 Spreading	Purple to red	White	 
American Filbert "Hazelnut"	<i>Corylus americana</i>	6 - 12	6 - 10	Copper red	Green	 
Dwarf Bush Honeysuckle	<i>Diervilla lonicera</i>	3	3	Red	Yellow	  
Leatherwood	<i>Dirca palustris</i>	3 - 6	3 - 6	Insignificant	Yellow	  
Common Witch Hazel	<i>Hamamelis virginiana</i>	20	15	Yellow	Yellow	
Winterberry	<i>Ilex verticillata</i>	6 - 8	6 - 8 Rounded	Yellow	White/green	 
Dwarf Ninebark	<i>Physocarpus opulifolius</i>	4 - 6	4 - 6	Insignificant	Pink/white	 
Choke Cherry	<i>Prunus virginiana</i>	20 - 35	12 - 15 Upright	Yellow to orange	White	 
Smooth Sumac	<i>Rhus glabra</i>	6 - 8	10 - 12	Bright red	Green-yellow	
Early Wild Rose	<i>Rosa blanda</i>	4	6	Red	Pink	
Swamp Rose	<i>Rosa palustris</i>	6	5	Red	White-Pink	
Red Willow	<i>Salix sericea</i>	6 - 8	6 Upright	Insignificant	None	
Canada Elder	<i>Sambucus Canadensis</i>	10	8	Yellow	White	 
Meadowsweet	<i>Spiraea alba</i>	5	7	Yellow	White	
Snowberry	<i>Symphoricarpos albus</i>	5	5 Round	Insignificant	pink	 
Coralberry	<i>Symphoricarpos orbiculatus</i>	3	4	Yellow	White/green	  
Nannyberry	<i>Viburnum lentago</i>	15 - 20	10 - 20	Maroon red	White	 
Downy Arrowwood	<i>V. rafinesquianum</i>	6 - 8	6 - 8 Upright	Orange-red	White	 
American Cranberry	<i>Viburnum trilobum</i>	6 - 12	6 - 12	Red-purple	White	 
Wolfberry	<i>Symphoricarpos occidentalis</i>	2 - 4	4 - 6	Insignificant	White - pink	
Wahoo	<i>Euonymus atropurpurea</i>	10-15	10-12	Bright red	Purple	 

### Understory trees (small trees to very tall shrubs)

Name	Species	Height in feet	Width in feet	Fall leaves	Flowers	Light
Downy Serviceberry	<i>Amelanchier arborea</i>	15 - 25	10 - 15	Orange/yellow	White	 
Blue Beech "Musclewood"	<i>Carpinus caroliniana</i>	20 - 30	20 - 30 Round/broad	Yellow to red	Green	 
Downy Hawthorn	<i>Crataegus mollis</i>	25	25	Red	White	  
American Plum	<i>Prunus americana</i>	20 - 35	20 - 35 Horizontal	Dark red	White	
Allegheny Serviceberry/Shadblow	<i>Amelanchier laevis</i>	15 - 25	10 - 15	Orange/yellow	White	 
Pagoda Dogwood	<i>Cornus alternifolia</i>	15 - 20	15 Round/horizontal	Dark red-purple	White	  
Ironwood	<i>Ostrya virginiana</i>	30	30 Broad	Yellow	Green yellow	 
Pin Cherry	<i>Prunus pensylvanica</i>	20 - 35	10 - 20 Columnar	Bright red/orange	White	
Pussy Willow	<i>Salix discolor</i>	20	10 Upright	Insignificant	Silvery gray	

## More information

### Websites

*MN Dept of Natural Resources*

Phone: 651-296-2835

[www.dnr.state.mn.us.html](http://www.dnr.state.mn.us.html)

*Yard and Garden Brief – Common Buckthorn Identification*

University of Minnesota Extension Services

[www.extension.umn.edu/projects/yardandgarden/](http://www.extension.umn.edu/projects/yardandgarden/ygbriefs/h402buckthorn-common.html)

[ygbriefs/h402buckthorn-common.html](http://ygbriefs/h402buckthorn-common.html)

### Merchandise

*Buckthorn Busters* t-shirts, buttons, signs and display material

[www.justaddwater.ws/buckthornhome.htm](http://www.justaddwater.ws/buckthornhome.htm)

### Educate your friends and neighbors

**Spread the message about buckthorn!**

**Oftentimes, your neighbors may not know that buckthorn is a problem. Education is the first step in understanding the invasiveness of this exotic shrub.**

### Agencies

*Invasive Species Program*

Minnesota Dept of Agriculture

90 West Plato Blvd., St. Paul MN 55107-2094

Phone: 651-296-8328

[www.mda.state.mn.us](http://www.mda.state.mn.us)

*Harmful Exotic Species Program*

MN Dept of Natural Resources

500 Lafayette Rd, Box 25,

St. Paul MN 55155-4025

Phone: 651-297-1464

Sources: Minnesota Department of Natural Resources, Friends of the Parks and Trails of St. Paul and Ramsey County.